

ABB BALDOR RELIANCE III

Customer information packet

VWDM3538

.5HP, 1775RPM, 3PH, 60HZ, 56C, 3514M, TENV, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	TENV
Frame	56C
Frame Material	Steel
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	.500 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ 460.0 V @ 60 HZ
Agency Approvals	C UR US
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Auxiliary Box Lead Termination	None
Base Indicator	No Mounting
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	1.010 A @ 460.0 V 2.020 A @ 230.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	81.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	1.0 a
Insulation Class	F
Inverter Code	Inverter Duty

Part Detail

Revision	A
Type	AC
Mech. spec.	35S603
Base	
Status	PRD/A
Elec. spec.	35WGG069
Layout	35LYS603
Eff. date	06-05-2025
CD Diagram	CD0005
Poles	04
Leads	9#18
Proprietary	False
Created date	09-15-2023

KVA Code	N
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Quantity/Wire Size	9 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3514M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	11.06 IN
Power Factor	63
Product Family	Wash Down
Pulley End Bearing Type	Sealed Bearing
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.25
Shaft Diameter	0.625 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	1775 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	None
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None
Winding Thermal 2	None

Nameplate

NP1496L											
CAT.NO.	VWDM3538										
SPEC.	35S603G069G5										
HP	.5										
VOLTS	230/460										
AMP	2.02/1.01										
RPM	1775										
FRAME	56C		HZ	60				PH	3		
SER.F.	1.25		CODE	N	DES	B		CLASS	F		
NEMA-NOM-EFF	81.5		PF	63							
RATING	40C AMB-CONT										
CC											
DE	6205		ODE	6203							
ENCL	TENV		SN								
	SFA 2.2/1.1										

Parts List

Part number	Description	Quantity
SA418458	SA 35S603G069G5	1.000 ea
RA410361	RA 35S603G069G5	1.000 ea
NS2512A01	INSULATOR, CONDUIT BOX X	1.000 ea
35CB3008A01G	SPL CONDUIT BOX, MACHINED GRAY	1.000 ea
35GS1039	05 MOLDED GASKET W/LIP, 1.12 LEAD HOLE,	1.000 ea
51XB1016A08	10-16X 1/2HXWSSLD SERTYB	2.000 ea
11XW1032G06	10-32 X .38, TAPTITE II, HEX WSHR SLTD U	1.000 ea
35EP3122D00W	MASTER ODE,203 BRG,.125NPT DRNS(WHITE)	1.000 ea
HW4072A01	BLACK DRAIN PLUG FOR .125 NPT	3.000 ea
HW5100A03	WAVY WASHER (W1543-017)	1.000 ea
35EP3307E00W	MASTER DE,205 BRG,1.623SH,.125NPT DRNS,C	1.000 ea
HW4072A01	BLACK DRAIN PLUG FOR .125 NPT	3.000 ea
HW4600B49	SEAL 0.938 X 1.624 X 0.250 SINGLE LIP DB	1.000 ea
12XN1032S20	10-32 X 1-1/4 HEX M.S. , STAINLESS STEEL	2.000 ea
35CB4522	35 LIPPED CB LID PRIMED	1.000 ea
35GS1030A02	35 GS FOR CB LID - WHITE NEOPRENE	1.000 ea
59XW0832S07	TAPTITE II,HEX WSHR UNSLTD SER,410 S.S.,	4.000 ea
HW4600B32SP	V-RING SLINGER 1.000 X 1.540 X .24 VITON	1.000 ea
HW2502D13	SS KEY, 3/16 SQ X 1.375	1.000 ea
HA7000A04	KEY RETAINER 0.625 DIA SHAFTS	1.000 ea
MJ5001A27	32220KN GRAY SEALER *MIN BUY 4 QTS=1GAL	0.001 qt
LB1164	LABEL,WARNING AND DRAIN	1.000 ea
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
HA5027A02	HA4054 T-DRAIN X2 BAGGED WITH LABEL	1.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb
MG1025Z02	ACTIVATOR WILKOFAS 060.02HF 55 GALLON	0.010 ga
MG1025W01	WILKOFAS 781.01, SIGNAL WHITE #9003	0.017 ga
HA3100S38	THRUBOLT 10-32X 7.5 SS	4.000 ea
LC0005	CONN.DIA.,TY M,9-LD,DUAL VOLT,REVERSING	1.000 ea
NP1496L	SS WD UL CC	1.000 ea
35PA1066	PKG GRP, PRINT PK1008A07	1.000 ea

PK3082	STYROFOAM CRADLE	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
FE-0000001	ZRTG FE ASSEMBLY	1.000 ea
PE-0000002	ZRTG PE ASSEMBLY	1.000 ea

AC Induction Motor Performance Data

Record # 100503

Typical performance - not guaranteed values

Winding: 35WGG069-R077			Type: 3514M	Enclosure: TENV	
Nameplate Data			460 V, 60 Hz: High Voltage Connection		
Rated Output (HP)		.5	Full Load Torque		1.48 LB-FT
Volts		230/460	Start Configuration		direct on line
Full Load Amps		2.02/1.01	Breakdown Torque		8 LB-FT
R.P.M.		1775	Pull-up Torque		4.4 LB-FT
Hz	60	Phase	3	Locked-rotor Torque	5.1 LB-FT
NEMA Design Code	B	KVA Code	N	Starting Current	8.4 A
Service Factor (S.F.)		1.25	No-load Current		0.85 A
NEMA Nom. Eff.	81.5	Power Factor	63	Line-line Res. @ 25°C	30.3 Ω
Rating - Duty		40C AMB-CONT	Temp. Rise @ Rated Load		44°C
S.F. Amps		2.2/1.1	Temp. Rise @ S.F. Load		51°C
			Locked-rotor Power Factor		66.8
			Rotor inertia		0.101 lb-ft²

Load Characteristics 460 V, 60 Hz, 0.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	24	37	48	58	65	71	65
Efficiency	58.9	72.5	78.4	80.5	81.6	81.5	81.6
Speed	1793	1788	1782	1776	1771	1763	1771
Line amperes	0.85	0.89	0.94	1.01	1.11	1.21	1.11

ABB Motors and Mechanical Inc.

WINDING # 35WGG069

Typical performance - not guaranteed values.

0.5 HP 3 PH 60 HZ 1775 RPM 460 V 3514M

TORQUES (LB-FT) : PO=8 PU=4.4 LR=5.1 LRA=8.4





